ELSEVIER

Field Crops Research 44 (1995) 159–160

Field Crops Research

Keyword Index — Volumes 40–44 (1995)

Aeschynomene afraspera, (42) 39
Antagonistic bacteria, (43) 51
Assimilate partitioning, (41) 79
Atmospheric CO_2, (41) 13
Auxanometer, (42) 135

Barley, (43) 77, (44) 85
Bean, (41) 179
Biomass, (42) 1
Brassica, (42) 125
Brassica napus, (44) 95, (44) 103
Breeding, (41) 141, (41) 147
Breeding strategy, (41) 45
Broad-leaf crops, (43) 19

Calcium peroxide, (41) 123
Cannabis sativa, (42) 27
Canola, (42) 1
Capitulum, (44) 111
Carbohydrate, (42) 93
Cassava, (42) 111, (43) 131, (44) 151
Cereals, (44) 1, (44) 13
CERES-Wheat, (42) 81
Competition, (41) 135, (43) 131, (44) 25
Correlated response, (41) 173
Cotton, (43) 51
Crop comparison, (41) 1
Crop establishment, (41) 123, (44) 129
Cultivar identification, (43) 43

Date of sowing, (42) 125
Development, (44) 73
Disease, (42) 69, (43) 51
Drought, (41) 147, (42) 1, (42) 69, (43) 77, (44) 13, (44) 139

Emergence, (41) 167
Environmental factors, (42) 111, (43) 119, (44) 55
Evaporation, (41) 179

Fertilizer, (41) 109, (42) 27, (43) 87, (44) 33, (44) 41
Fibre hemp, (42) 27
Field validation, (41) 79
Flood tolerance, (44) 129
Flowering, (41) 25, (44) 95
Forage, (44) 1
Freeze sensitivity, (44) 95

Genotype, (42) 111
Genotype × environment interaction, (41) 55, (43) 109, 119
Glucose requirement, (44) 119
Glucosinolate, (44) 41
Glycine max, (41) 141, (43) 43
Gossipium hirsutum, (43) 51
Gossypium, (41) 13
Grain, (44) 1, (44) 85
Grain filling, (44) 111
Grain weight, (43) 55
Grain yield, (41) 55
Grass barriers, (43) 131
Grasses, (43) 131
Growth stages, (44) 103

Harvest index, (44) 139
Helianthus annuus, (41) 65, (44) 111, (44) 119
Heritability, (41) 173
High molecular weight glutenin, (41) 101
Hordeum vulgare, (41) 173, (43) 87, (44) 85

Indian mustard, (42) 1
Intercropping, (41) 135
Irrigation, (42) 57, (43) 101

Leaf appearance, (41) 35
Leaf area, (42) 125
Leaf number, (41) 91, (42) 125, (44) 67
Leaf senescence, (43) 77

Maize, (41) 1, (41) 179, (43) 1, (44) 25, (44) 33
Malting barley, (43) 87
Management practices, (41) 1, (41) 123, (41) 167, (42) 27, (42) 125, (44) 129
Manihot esculenta, (42) 111, (44) 151
Maturity, (41) 141
Mediterranean agriculture, (41) 135
Millet, (41) 109, (43) 67
Mineral nutrition, (43) 119
Modelling, (41) 35, (41) 79, (41) 91, (43) 1, (43) 67, (44) 67
Moisture stress, (42) 57
Morphology, (42) 27

Mungbean, (43) 31
Mutant, (41) 101

Nitrogen, (42) 27, (42) 93, (42) 101, (43) 19, (43) 87, (43) 101, (44) 25, (44) 33, (44) 41, (44) 55, (44) 119
Nitrogen fixation, (42) 39

Oats, (41) 135
Oilseed rape, (44) 41, (44) 103
Oryza, (41) 167
Oryza sativa, (42) 39, (44) 129, (44) 139

Pattern analysis, (43) 119
Pea, (41) 79
Pennisetum glaucum, (43) 67
Pennisetum typhoides, (42) 57
Phenology, (41) 155, (42) 125
Phosphorus, (42) 101
Photoperiod, (41) 25, (41) 155, (44) 73
Photosynthesis, (41) 13
Physiology, (44) 103
Pigeonpea, (41) 25
Plant/leaf extension, (42) 135
Plant age, (41) 91
Planting material, (44) 151
Plant population, (41) 167
Pod growth, (41) 79
Productivity, (44) 151
Protein, (41) 101

Radiation interception, (44) 111
Radiation use, (43) 77, (44) 119
Radiation-use efficiency, (41) 65
Random amplified polymorphic DNA, (43) 43
Rice, (41) 123, (42) 101, (43) 31, (44) 129, (44) 139
Root distribution, (43) 67
Root growth, (43) 131
Rooting patterns, (43) 131
Rotations, (43) 19

Saccharum, (43) 101
Salinity, (42) 15
Salinity tolerance, (42) 15
SDS-PAGE, (41) 101
Seedling establishment, (43) 31
Seed yield, (44) 95
Selection, (41) 173, (43) 109
Selection index, (43) 109
Self-thinning, (42) 27
Semidwarfism, (43) 55
Senegal, (41) 109
Sesbania rostrata, (42) 39
Sink demand, (41) 79
Soil conditions, (43) 19
Soil fertility, (44) 151
Soil tolerance, (41) 141
Solar radiation, (43) 1
Sorghum, (42) 15
Sorghum bicolor, (42) 57
Source–sink, (42) 69
Source–sink relationship, (42) 93, (43) 55
Sowing date, (42) 81, (43) 19, (44) 1
Soybean, (41) 1
Specific leaf nitrogen, (41) 65
Stomatal conductance, (43) 67
Stress tolerance, (41) 45
Sugarcane, (42) 135, (43) 109, (43) 119
Sulphur, (44) 41
Sunflower, (41) 1, (41) 65, (44) 111, (44) 119
Susceptibility index, (41) 147

Temperature, (41) 13, (41) 25, (41) 35, (42) 135, (43) 1, (44) 73, (44) 85, (44) 95, (44) 111
Tillering, (41) 55, (44) 85
Tiller mortality, (41) 55
Transpiration, (41) 13, (41) 179, (43) 67
Transpiration efficiency, (41) 179
Triticum, (41) 91, (44) 67
Triticum aestivum, (41) 45, (41) 55, (41) 147, (42) 93, (43) 55, (44) 55, (44) 73

Upland crop, (43) 31

Variety trials, (41) 123, (42) 69, (44) 129
Vernalization, (41) 91, (44) 67
Vetch, (41) 135
Viet Nam, (42) 101

Water extraction, (43) 67
Waterlogging, (44) 103
Water stress, (41) 147, (42) 81, (42) 135
Water use, (41) 109, (44) 13
Water-use efficiency, (41) 13, (44) 13
Wheat, (41) 55, (41) 91, (41) 101, (41) 147, (41) 155, (43) 19, (43) 55, (44) 67, (44) 73

Yield, (41) 1, (41) 173, (42) 1, (42) 69, (42) 81, (43) 1, (44) 55, (44) 85, (44) 103, (44) 111, (44) 129
Yield components, (43) 87, (44) 1, (44) 103
Yield decline, (42) 101

Zea mays, (42) 57, (42) 69, (43) 1, (44) 25, (44) 33

ELSEVIER

Field Crops Research 44 (1995) 161–163

Field Crops Research

Author Index — Volumes 40–44 (1995)

Acevedo, E. see Sayre, K.D. (41) 45
Affholder, F., Effect of organic matter input on the water balance and yield of millet under tropical dryland condition (41) 109
Andrade, F.H., Analysis of growth and yield of maize, sunflower and soybean grown at Balcarce, Argentina (41) 1
Anh, T.N. see Tan, P.S. (42) 101
Asare, E. and Scarisbrick, D.H., Rate of nitrogen and sulphur fertilizers on yield, yield components and seed quality of oilseed rape (*Brassica napus* L.) (44) 41
Austin, R.B. see Sayre, K.D. (41) 45

Baethgen, W.E., Christianson, C.B. and Lamothe, A.G., Nitrogen fertilizer effects on growth, grain yield, and yield components of malting barley (43) 87
Bänziger, M., Lafitte, H.R. and Edmeades, G.O., Intergenotypic competition during evaluation of maize progenies under limited and adequate N supply (44) 25
Bell, M.A., Fischer, R.A., Byerlee, D. and Sayre, K., Genetic and agronomic contributions to yield gains: A case study for wheat (44) 55
Bhargava, S.C. see Nanda, R. (42) 125
Bolaños, J., Physiological bases for yield differences in selected maize cultivars from Central America (42) 69
Bonachela, S., Orgaz, F. and Fereres, E., Winter cereals grown for grain and for the dual purpose of forage plus grain I. Production (44) 1
Bonachela, S., Orgaz, F. and Fereres, E., Winter cereals grown for grain and for the dual purpose of forage plus grain II. Water use and water-use efficiency (44) 13
Bouzerzour, H. and Dekhili, M., Heritabilities, gains from selection and genetic correlations for grain yield of barley grown in two contrasting environments (41) 173
Brooking, I.R. see Jamieson, P.D. (41) 35
Brooking, I.R., Jamieson, P.D. and Porter, J.R., The influence of daylength on final leaf number in spring wheat (41) 155
Bustos, A. see Cartagena, M.C. (44) 33
Byerlee, D. see Bell, M.A. (44) 55

Caballero, R., Goicoechea, E.L. and Hernaiz, P.J., Forage yields and quality of common vetch and oat sown at varying seeding ratios and seeding rates of vetch (41) 135
Caballero, R. see Cartagena, M.C. (44) 33
Cartagena, M.C., Vallejo, A., Díez, J.A., Bustos, A., Caballero, R. and Roman, R., Effect of the type of fertilizer and source of irrigation water on N use in a maize crop (44) 33
Cass, A. see Wright, P.R. (42) 1
Christianson, C.B. see Baethgen, W.E. (43) 87
Chuong, P.V. see Yamauchi, M. (41) 123
Connor, D.J. see Hall, A.J. (41) 65
Counce, P.A. and Keisling, T.C., Emergence date mediation of rice yield responses to equidistant spacing (41) 167

Dekhili, M. see Bouzerzour, H. (41) 173
Devienne, F. see Jeuffroy, M.-H. (41) 79
Díez, J.A. see Cartagena, M.C. (44) 33

Edmeades, G.O. see Bänziger, M. (44) 25
El Sharkawy, M.A. see Tscherning, K. (43) 131
El-Sharkawy, M.A. see Molina, J.L. (44) 151

Fereres, E. see Bonachela, S. (44) 1, 13
Fischer, R.A. see Wang, S.-Y. (41) 91; (44) 67
Fischer, R.A. see Bell, M.A. (44) 55
Flénet, F. and Kiniry, J.R., Efficiency of biomass accumulation by sunflower as affected by glucose requirement of biosynthesis and leaf nitrogen content (44) 119
Flower, D.J. see McIntyre, B.D. (43) 67
Francis, G.S. see Jamieson, P.D. (43) 77
Fukai, S. see Jearakongman, S. (44) 139

García del Moral, L.F. see García del Moral, M.B. (44) 85
García del Moral, M.B. and García del Moral, L.F., Tiller production and survival in relation to grain yield in winter and spring barley (44) 85
Garrity, D.P. see Torres, R.O. (42) 39
Garrity, D.P. and Liboon, S.P., A non-conventional method for establishing upland crops following lowland rice in saturated soils (43) 31
Goicoechea, E.L. see Caballero, R. (41) 135
Gracia, M.P. see Igartua, E. (42) 15

Hall, A.J., Connor, D.J. and Sadras, V.O., Radiation-use efficiency of sunflower crops: effects of specific leaf nitrogen and ontogeny (41) 65
Hall, A.J. see Savin, R. (42) 81
Hall, A.J. see Ploschuk, E.L. (44) 111
Haverkort, A.J. see Van der Werf, H.M.G. (42) 27
Heenan, D.P., Effects of broad-leaf crops and their sowing time on subsequent wheat production (43) 19
Hernaiz, P.J. see Caballero, R. (41) 135

Hilger, T.H. see Tscherning, K. (43) 131
Hodges, H.F. see Reddy, V.R. (41) 13
Hogarth, M. see Jackson, P. (43) 109, 119

Igartua, E., Gracia, M.P. and Lasa, J.M., Field responses of grain sorghum to a salinity gradient (42) 15
Inman-Bamber, N.G., Automatic plant extension measurement in sugarcane in relation to temperature and soil moisture (42) 135

Jackson, P., McRae, T. and Hogarth, M., Selection of sugarcane families across variable environments I. Sources of variation and an optimal selection index (43) 109
Jackson, P., McRae, T. and Hogarth, M., Selection of sugarcane families across variable environments II. Patterns of response and association with environmental factors (43) 119
Jamieson, P.D., Brooking, I.R., Porter, J.R. and Wilson, D.R., Prediction of leaf appearance in wheat: a question of temperature (41) 35
Jamieson, P.D. see Brooking, I.R. (41) 155
Jamieson, P.D., Martin, R.J., Francis, G.S. and Wilson, D.R., Drought effects on biomass production and radiation-use efficiency in barley (43) 77
Jearakongman, S., Rajatasereekul, S., Naklang, K., Romyen, P., Fukai, S., Skulkhu, E., Jumpaket, B. and Nathabutr, K., Growth and grain yield of contrasting rice cultivars grown under different conditions of water availability (44) 139
Jessop, R.S. see Wright, P.R. (42) 1
Jeuffroy, M.-H. and Devienne, F., A simulation model for assimilate partitioning between pods in pea (*Pisum sativum* L.) during the period of seed set; validation in field conditions (41) 79
Jumpaket, B. see Jearakongman, S. (44) 139

Kavilu, A.W. see Pilbeam, C.J. (41) 179
Keisling, T.C. see Counce, P.A. (41) 167
Kiniry, J.R. see Flénet, F. (44) 119

Ladha, J.K. see Torres, R.O. (42) 39
Lafitte, H.R. see Bänziger, M. (44) 25
Lamothe, A.G. see Baethgen, W.E. (43) 87
Lardon, A. and Triboi-Blondel, A.M., Cold and freeze stress at flowering Effects on seed yields in winter rapeseed (44) 95
Lasa, J.M. see Igartua, E. (42) 15
Lazar, M.D., Salisbury, C.D. and Worrall, W.D., Variation in drought susceptibility among closely related wheat lines (41) 147
Leihner, D.E. see Tscherning, K. (43) 131
Liboon, S.P. see Garrity, D.P. (43) 31
Lin, X. see Zhou, W. (44) 103
Luat, N.V. see Tan, P.S. (42) 101

Ma, Y.-Z., MacKown, C.T. and Van Sanford, D.A., Kernel mass and assimilate accumulation of wheat: cultivar responses to 50% spikelet removal at anthesis (42) 93
MacKown, C.T. see Ma, Y.-Z. (42) 93
Mak, C. see Tan, S.L. (42) 111
Mannanov, R.N. see Safiyazov, J.S. (43) 51
Martin, R.J. see Jamieson, P.D. (43) 77
McIntyre, B.D., Riha, S.J. and Flower, D.J., Water uptake by pearl millet in a semiarid environment (43) 67
McRae, T. see Jackson, P. (43) 109, 119
Mienie, C.M.S., Smit, M.A. and Pretorius, P.J., Use of random amplified polymorphic DNA for identification of South African soybean cultivars (43) 43
Mir Ali, N., Performance of high-protein mutant lines of *Triticum aestivum* (L.) under semi-arid conditions of Syria (41) 101
Miralles, D.J. and Slafer, G.A., Individual grain weight responses to genetic reduction in culm length in wheat as affected by source–sink manipulations (43) 55
Molina, J.L. and El-Sharkawy, M.A., Increasing crop productivity in cassava by fertilizing production of planting material (44) 151
Morgan, J.M. see Wright, P.R. (42) 1
Muchow, R.C. see Wilson, D.R. (43) 1
Müller-Sämann, K.M. see Tscherning, K. (43) 131
Murgatroyd, C.J. see Wilson, D.R. (43) 1

Naklang, K. see Jearakongman, S. (44) 139
Nanda, R., Bhargava, S.C. and Rawson, H.M., Effect of sowing date on rates of leaf appearance, final leaf numbers and areas in *Brassica campestris*, *B. juncea*, *B. napus* and *B. carinata* (42) 125
Nathabutr, K. see Jearakongman, S. (44) 139

Omanga, P.A., Summerfield, R.J. and Qi, A., Flowering of pigeonpea (*Cajanus cajan*) in Kenya: Responses of early-maturing genotypes to location and date of sowing (41) 25
Orgaz, F. see Bonachela, S. (44) 1, 13

Pareek, R.P. see Torres, R.O. (42) 39
Pilbeam, C.J., Simmonds, L.P. and Kavilu, A.W., Transpiration efficiencies of maize and beans in semi-arid Kenya (41) 179
Ploschuk, E.L. and Hall, A.J., Capitulum position in sunflower affects grain temperature and duration of grain filling (44) 111
Porter, J.R. see Jamieson, P.D. (41) 35
Porter, J.R. see Brooking, I.R. (41) 155
Pretorius, P.J. see Mienie, C.M.S. (43) 43
Puckridge, D.W. see Tan, P.S. (42) 101

Qi, A. see Omanga, P.A. (41) 25

Rajatasereekul, S. see Jearakongman, S. (44) 139
Rawson, H.M. see Nanda, R. (42) 125
Rawson, H.M. see Slafer, G.A. (44) 73
Reddy, K.R. see Reddy, V.R. (41) 13
Reddy, V.R., Reddy, K.R. and Hodges, H.F., Carbon dioxide enrichment and temperature effects on cotton canopy photosynthesis, transpiration, and water-use efficiency (41) 13
Riha, S.J. see McIntyre, B.D. (43) 67
Ritchie, J.T. see Wang, S.-Y. (41) 91; (44) 67
Roman, R. see Cartagena, M.C. (44) 33
Romyen, P. see Jearakongman, S. (44) 139

Sadras, V.O. see Hall, A.J. (41) 65
Safiyazov, J.S., Mannanov, R.N. and Sattarova, R.K., The use of bacterial antagonists for the control of cotton diseases (43) 51
Salisbury, C.D. see Lazar, M.D. (41) 147
Satorre, E.H. see Savin, R. (42) 81
Sattarova, R.K. see Safiyazov, J.S. (43) 51
Savin, R., Satorre, E.H., Hall, A.J. and Slafer, G.A., Assessing strategies for wheat cropping in the monsoonal climate of the Pampas using the CERES-Wheat simulation model (42) 81
Sayre, K. see Bell, M.A. (44) 55
Sayre, K.D., Acevedo, E. and Austin, R.B., Carbon isotope discrimination and grain yield for three bread wheat germplasm groups grown at different levels of water stress (41) 45
Scarisbrick, D.H. see Asare, E. (44) 41
Schulthess, U. see Wang, S.-Y. (41) 91; (44) 67
Sharma, A.R., Direct seeding and transplanting for rice production under flood-prone lowland conditions (44) 129
Sharma, R.C., Tiller mortality and its relationship to grain yield in spring wheat (41) 55
Simmonds, L.P. see Pilbeam, C.J. (41) 179
Singh, B.R. and Singh, D.P., Agronomic and physiological responses of sorghum, maize and pearl millet to irrigation (42) 57
Singh, D.P. see Singh, B.R. (42) 57
Skulkhu, E. see Jearakongman, S. (44) 139
Slafer, G.A. see Savin, R. (42) 81
Slafer, G.A. see Miralles, D.J. (43) 55
Slafer, G.A. and Rawson, H.M., Photoperiod × temperature interactions in contrasting wheat genotypes: Time to heading and final leaf number (44) 73
Smit, M.A. see Mienie, C.M.S. (43) 43
Spehar, C.R., Impact of strategic genes in soybean on agricultural development in the Brazilian tropical savannahs (41) 141
Summerfield, R.J. see Omanga, P.A. (41) 25

Tan, P.S., Anh, T.N., Luat, N.V. and Puckridge, D.W., Yield trends of a long-term NPK experiment for intensive rice monoculture in the Mekong River Delta of Viet Nam (42) 101
Tan, S.L. and Mak, C., Genotype×environment influence on cassava performance (42) 111
Torres, R.O., Pareek, R.P., Ladha, J.K. and Garrity, D.P., Stem-nodulating legumes as relay-cropped or intercropped green manures for lowland rice (42) 39
Triboi-Blondel, A.M. see Lardon, A. (44) 95
Tscherning, K., Leihner, D.E., Hilger, T.H., Müller-Sämann, K.M. and El Sharkawy, M.A., Grass barriers in cassava hillside cultivation: Rooting patterns and root growth dynamics (43) 131

Vallejo, A. see Cartagena, M.C. (44) 33
Van der Werf, H.M.G., Van Geel, W.C.A., Van Gils, L.J.C. and Haverkort, A.J., Nitrogen fertilization and row width affect self-thinning and productivity of fibre hemp (*Cannabis sativa* L.) (42) 27
Van Geel, W.C.A. see Van der Werf, H.M.G. (42) 27
Van Gils, L.J.C. see Van der Werf, H.M.G. (42) 27
Van Sanford, D.A. see Ma, Y.-Z. (42) 93

Wang, S.-Y., Ward, R.W., Ritchie, J.T., Fischer, R.A. and Schulthess, U., Vernalization in wheat I. A model based on the interchangeability of plant age and vernalization duration (41) 91
Wang, S.-Y., Ward, R.W., Ritchie, J.T., Fischer, R.A. and Schulthess, U., Vernalization in wheat II. Genetic variability for the interchangeability of plant age and vernalization duration (44) 67
Ward, R.W. see Wang, S.-Y. (41) 91; 44) 67
Wiedenfeld, R.P., Effects of irrigation and N fertilizer application on sugarcane yield and quality (43) 101
Wilson, D.R. see Jamieson, P.D. (41) 35; (43) 77
Wilson, D.R., Muchow, R.C. and Murgatroyd, C.J., Model analysis of temperature and solar radiation limitations to maize potential productivity in a cool climate (43) 1
Worrall, W.D. see Lazar, M.D. (41) 147
Wright, P.R., Morgan, J.M., Jessop, R.S. and Cass, A., Comparative adaptation of canola (*Brassica napus*) and Indian mustard (*B. juncea*) to soil water deficits: yield and yield components (42) 1

Yamauchi, M. and Chuong, P.V., Rice seedling establishment as affected by cultivar, seed coating with calcium peroxide, sowing depth, and water level (41) 123

Zhou, W. and Lin, X., Effects of waterlogging at different growth stages on physiological characteristics and seed yield of winter rape (*Brassica napus* L.) (44) 103